

General

Guideline Title

Colposcopic management of abnormal cervical cytology and histology.

Bibliographic Source(s)

Bentley J. Colposcopic management of abnormal cervical cytology and histology. J Obstet Gynaecol Can. 2012 Dec;34(12):1188-202. [95 references] [PubMed](#)

Guideline Status

This is the current release of the guideline.

Recommendations

Major Recommendations

The quality of evidence (I-III) and classification of recommendations (A-L) are defined at the end of the "Major Recommendations."

Managing Cytological Abnormalities

The age of the patient may affect management and where pertinent will be identified in the recommendation.

The Colposcopy Examination

1. Colposcopic findings are best described according to the terminology defined by the International Federation for Cervical Pathology and Colposcopy. (III-C)
2. At colposcopy, 2 or more biopsy specimens should be taken. (I-A)
3. An endocervical curettage should be performed when the transformation zone is not visible in women with atypical glandular cells (AGC) Papanicolaou (Pap) smear and in women over 45 years old with high-grade cytology. (II-2B)
4. Routine high-risk human papillomavirus (HR-HPV) testing for all colposcopy referrals is discouraged. (III-C)

Managing Women With Atypical Squamous Cells of Undetermined Significance (ASCUS) or Low-grade Squamous Intraepithelial Lesion (LSIL) on Referral for Colposcopy

5. A woman with persistent (ASCUS/LSIL) or ASCUS HR-HPV positive cytology should be referred for colposcopy as directed by provincial/territorial guidelines. (III-A)
6. A colposcopically identified lesion should be biopsied. (III-C)
7. If no lesion is identified, biopsies of the transformation zone should be considered. (III-C)

Managing ASC-H

8. A woman with an atypical squamous cells-cannot exclude high-grade squamous intraepithelial lesion (ASC-H) Pap smear should have colposcopy to rule out cervical intraepithelial neoplasia (CIN) 2 or 3 and/or cancer. (II-2A)
9. Biopsies should be performed on any identifiable lesions at colposcopy. (II-2A)
10. With an ASC-H Pap smear, the finding of negative colposcopy does not automatically warrant a diagnostic excisional procedure. (III-E)

Managing HSIL

11. All women with an high-grade squamous intraepithelial lesion (HSIL) test result should have colposcopy. (II-2A)
12. In the absence of an identifiable lesion at colposcopy, whether satisfactory or unsatisfactory, an endocervical curettage and directed biopsies should be performed. (III-B)
13. In women with HSIL, when the transformation zone is not seen in its entirety and endocervical curettage and/or biopsy results are negative, a diagnostic excisional procedure should be considered. (III-B)

Managing Atypical Glandular Cytology (Atypical Glandular Cells-Not Otherwise Specified [AGC-NOS], Atypical Glandular Cells-Favour Neoplasia [AGC-N], Adenocarcinoma in Situ [AIS])

14. The finding of an AGC Pap smear warrants colposcopy. (II-2A)
15. All women with an AGC Pap smear should have an endocervical curettage. Women over 35 years of age or with a history of abnormal bleeding should have endometrial sampling. (II-2A)
16. Women with an AGC-N Pap smear without an identifiable lesion at colposcopy should undergo a diagnostic excisional procedure. (II-2A)

Managing Squamous Cell Carcinoma and Adenocarcinoma on Cytology

17. Women with a cytologic diagnosis suggestive of carcinoma, with or without a visible lesion, should have colposcopy and appropriate biopsies. (III-A)

Managing the Patient With Abnormal HPV Test and Normal Cytology

18. Women less than 30 years old should not have HR-HPV testing done as a screen with cytology. (II-2E)
19. Women less than 30 years old who are HR-HPV positive and have normal cytology should be followed as per provincial/territorial guidelines; colposcopy is not required. (III-B)
20. Women 30 years old and over who test positive for HR-HPV and have negative cytology should have HR-HPV and cytology testing repeated at 12 months. Persistent positive HR-HPV tests warrant colposcopy. (I-A)

Managing Abnormal Cytology in Pregnancy

21. Women with an ASC-US or LSIL test result during pregnancy should have repeat cytology testing at 3 months post pregnancy. (III-B)
22. Pregnant women with HSIL, ASC-H, or AGC should be referred for colposcopy within 4 weeks. (III-B)
23. Endocervical curettage should not be performed during pregnancy. (III-D)

Managing Abnormal Cytology in Women Less Than 21 Years Old

24. Cytological screening should not be initiated in women less than 21 years old. (II-2E)
25. If screening is done in a woman less than 21 years old, and an ASCUS or LSIL result is reported, cytology should be repeated only per provincial or territorial guidelines. (III-B)
26. A woman less than 21 years old who has cytology results of ASC-H, HSIL, and AGC should be referred for colposcopy. (III-B)

Managing Histological Abnormalities

Managing CIN 1

27. The preferred option for biopsy-proven CIN 1 is observation with repeat assessment at 12 months with cytology testing. (Colposcopy at 12 months is an acceptable option.) Management should be according to the cytology result. (II-1B)
28. In the case of a patient with biopsy-proven CIN 1 after HSIL or AGC, cytology and histology should be reviewed, where available. If a discrepancy remains, then an excisional biopsy may be considered. (III-B)

Managing CIN 2 or 3 in Women Aged 25 Years and Over

29. CIN 2 or 3 should be treated. Excisional procedures are preferred for CIN 3. (II-1A)
30. Women who have positive margins should have follow-up with colposcopy and directed biopsies and/or endocervical curettage. Treatment for recurrent or persistent CIN 2 or 3 should be by excision. (II-1B)

Managing CIN 2 or 3 in Women Less Than 25 Years Old

31. The pathologist should be asked to clarify whether the lesion is CIN 2 or CIN 3. (III-B)
32. CIN 2 in women less than 25 years old should be observed with colposcopy at 6-month intervals for up to 24 months before treatment is considered. (II-2B)
33. CIN 3 in women less than 25 years old should be treated. (III-B)

Managing Adenocarcinoma in Situ

34. If AIS is diagnosed, treatment needs to be a diagnostic excisional procedure, or type 3 transformation zone excision. (II-2A)
35. If margins are positive after diagnostic excisional procedure, a second excisional procedure should be performed. (II-2A)
36. If after treatment for AIS a woman has finished childbearing, a hysterectomy should be considered. (III-B)
37. If AIS is diagnosed after loop electrosurgical excision procedure (LEEP) is performed for CIN in a woman who has not completed her family and margins are negative, it is unnecessary to perform a further diagnostic excisional procedure. (II-2E)

Managing Histological Abnormalities During Pregnancy

38. If CIN 2 or CIN 3 is suspected or diagnosed during pregnancy, repeat colposcopy and treatment should be delayed until 8 to 12 weeks after delivery. (II-2A)

Follow-up Post Treatment

Either option is acceptable:

39. Women should be followed with cytology testing and colposcopy at 6-month intervals for 2 visits. If both cytology and any biopsies are negative, they will then return to screening per provincial/territorial guidelines. (II-2B)
40. HPV testing at 6 months combined with cytology testing is acceptable. If both are negative, women may return to screening per provincial/territorial guidelines. (II-2B)

Managing Histological Abnormalities in Women at High Risk

41. Immunocompromised women do not require screening colposcopy. (II-2D)

Wait Times for Colposcopy

42. Women with ASC-H or AGC should be seen in a colposcopy clinic within 6 weeks of referral. (III-C)
43. Women with HSIL should ideally be seen in a colposcopy clinic within 4 weeks of referral. (III-C)
44. Women with a Pap smear suggestive of carcinoma should be seen in a colposcopy clinic within 2 weeks of referral. (III-C)
45. All other women with abnormal results should be seen in a colposcopy clinic within 12 weeks of referral. (III-C)

Definitions:

Quality of Evidence Assessment*

I: Evidence obtained from at least one properly randomized controlled trial

II-1: Evidence from well-designed controlled trials without randomization

II-2: Evidence from well-designed cohort (prospective or retrospective) or case-control studies, preferably from more than one centre or research group

II-3: Evidence obtained from comparisons between times or places with or without the intervention. Dramatic results in uncontrolled experiments (such as the results of treatment with penicillin in the 1940s) could also be included in this category

III: Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees

*Adapted from the Evaluation of Evidence criteria described in the Canadian Task Force on Preventive Health Care.

Classification of Recommendations†

- A. There is good evidence to recommend the clinical preventive action
- B. There is fair evidence to recommend the clinical preventive action
- C. The existing evidence is conflicting and does not allow to make a recommendation for or against use of the clinical preventive action; however, other factors may influence decision-making
- D. There is fair evidence to recommend against the clinical preventive action
- E. There is good evidence to recommend against the clinical preventive action
- L. There is insufficient evidence (in quantity or quality) to make a recommendation; however, other factors may influence decision-making

†Adapted from the Classification of Recommendations criteria described in the Canadian Task Force on Preventive Health Care.

Clinical Algorithm(s)

None provided

Scope

Disease/Condition(s)

Abnormal cytology results after screening for cervical cancer

Guideline Category

Diagnosis

Evaluation

Management

Screening

Treatment

Clinical Specialty

Family Practice

Internal Medicine

Obstetrics and Gynecology

Oncology

Intended Users

Advanced Practice Nurses

Nurses

Patients

Physician Assistants

Physicians

Guideline Objective(s)

To provide a guideline for managing abnormal cytology results after screening for cervical cancer, to clarify the appropriate algorithms for follow-up after treatment, and to promote the best possible care for women while ensuring efficient use of available resources

Target Population

Canadian women over age 21

Interventions and Practices Considered

Evaluation/Diagnosis

1. Colposcopy examination
 - Two or more specimens
2. Biopsy
3. Endocervical curettage
4. High-risk human papillomavirus (HR-HPV) testing

Management

1. Observation with repeat assessment in 6-12 months
2. Excisional procedure, including loop electrosurgical excision procedure (LEEP)
3. Hysterectomy
4. Follow-up post treatment
 - Cytology testing and colposcopy at 6 month intervals
 - HPV testing at 6 months
5. Referral to colposcopy clinic

Major Outcomes Considered

- Risk of developing cervical cancer
- Harm done to women not at risk

Methodology

Methods Used to Collect/Select the Evidence

Searches of Electronic Databases

Searches of Unpublished Data

Description of Methods Used to Collect/Select the Evidence

Published literature was retrieved through searches of PubMed or Medline, CINAHL, and The Cochrane Library in October 2008 using appropriate controlled vocabulary (e.g., colposcopy, cervical dysplasia) and key words (e.g., colposcopy management, CIN, AGC, cervical dysplasia, LEEP, LLETZ, HPV testing, cervical dysplasia triage). Results were restricted to systematic reviews, randomized control

trials/controlled clinical trials, and observational studies. There were no date or language restrictions. Searches were updated on a regular basis and incorporated in the guideline to July 2012. Grey (unpublished) literature was identified through searching the websites of health technology assessment and health technology assessment-related agencies, clinical practice guideline collections, and national and international medical specialty societies.

Expert opinion from published peer-reviewed literature and evidence from clinical trials is summarized. Consensus opinion is outlined when evidence is insufficient.

Number of Source Documents

Not stated

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

Quality of Evidence Assessment*

I: Evidence obtained from at least one properly randomized controlled trial

II-1: Evidence from well-designed controlled trials without randomization

II-2: Evidence from well-designed cohort (prospective or retrospective) or case-control studies, preferably from more than one centre or research group

II-3: Evidence obtained from comparisons between times or places with or without the intervention. Dramatic results in uncontrolled experiments (such as the results of treatment with penicillin in the 1940s) could also be included in this category

III: Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees

*Adapted from the Evaluation of Evidence criteria described in the Canadian Task Force on Preventive Health Care.

Methods Used to Analyze the Evidence

Review of Published Meta-Analyses

Systematic Review

Description of the Methods Used to Analyze the Evidence

The quality of evidence was rated using the criteria described in the Report of the Canadian Task Force on Preventive Health Care (see the "Rating Scheme for the Strength of the Evidence" field).

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

Not stated

Rating Scheme for the Strength of the Recommendations

Classification of Recommendations†

- A. There is good evidence to recommend the clinical preventive action
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- C. The existing evidence is conflicting and does not allow to make a recommendation for or against use of the clinical preventive action; however, other factors may influence decision-making
- D. There is fair evidence to recommend against the clinical preventive action
- E. There is good evidence to recommend against the clinical preventive action
- L. There is insufficient evidence (in quantity or quality) to make a recommendation; however, other factors may influence decision-making

†Adapted from the Classification of Recommendations criteria described in the Canadian Task Force on Preventive Health Care.

Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

Method of Guideline Validation

External Peer Review

Internal Peer Review

Description of Method of Guideline Validation

This guideline has been reviewed for accuracy from content experts in cytology, pathology, and cervical screening programs. Guideline content was also compared with similar documents from other organizations including the American Society for Colposcopy and Cervical Pathology, the British Society for Colposcopy and Cervical Pathology, and the European Cancer Network.

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of supporting evidence is identified and graded for each recommendation (see the "Major Recommendations" field).

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

- Appropriate management of abnormal cervical cytology and histology
- Standardizing the colposcopic care provided for women in Canada

Potential Harms

In women less than 21 years, if a Papanicolaou (Pap) smear has been done and abnormalities are detected at screening, management should be

conservative to prevent harm.

Qualifying Statements

Qualifying Statements

This document reflects emerging clinical and scientific advances on the date issued and is subject to change. The information should not be construed as dictating an exclusive course of treatment or procedure to be followed. Local institutions can dictate amendments to these opinions. They should be well documented if modified at the local level. None of these contents may be reproduced in any form without prior written permission of the Society of Obstetricians and Gynaecologists of Canada (SOGC).

Implementation of the Guideline

Description of Implementation Strategy

An implementation strategy was not provided.

Implementation Tools

Foreign Language Translations

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Staying Healthy

IOM Domain

Effectiveness

Identifying Information and Availability

Bibliographic Source(s)

Bentley J. Colposcopic management of abnormal cervical cytology and histology. J Obstet Gynaecol Can. 2012 Dec;34(12):1188-202. [95 references] [PubMed](#)

Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2012 Dec

Guideline Developer(s)

Society of Obstetricians and Gynaecologists of Canada - Medical Specialty Society

Source(s) of Funding

Society of Obstetricians and Gynaecologists of Canada

Guideline Committee

Executive Council of the Society of Canadian Colposcopists

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Financial Disclosures/Conflicts of Interest

Disclosure statements have been received from all authors.

Guideline Status

This is the current release of the guideline.

Guideline Availability

Electronic copies: Available in Portable Document Format (PDF) from the [Society of Obstetricians and Gynaecologists of Canada \(SOGC\) Web site](#) . Also available in French from the [SOGC Web site](#) .

Print copies: Available from the Society of Obstetricians and Gynaecologists of Canada (SOGC), La société des obstétriciens et gynécologues du Canada (SOGC) 780 promenade Echo Drive Ottawa, ON K1S 5R7 (Canada); Phone: 1-800-561-2416.

Availability of Companion Documents

None available

Patient Resources

None available

NGC Status

This NGC summary was completed by ECRI Institute on February 8, 2013. The information was verified by the guideline developer on March 21, 2013.

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